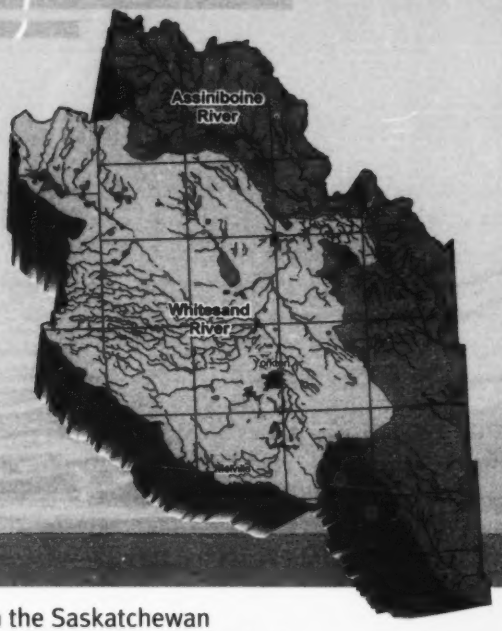
Draft:

Assiniboine River Watershed

Source Water Protection Plan — Summary



Residents of the Assiniboine River Watershed, with assistance from the Saskatchewan Watershed Authority and other agencies, have prepared a draft **Assiniboine River Watershed Source Water Protection Plan**. A copy of the draft plan is available online at www.swa.ca. This document provides a summary of that plan.

The Assiniboine River and Whitesand River Watershed Advisory Committees invite you to review and comment on the proposed objectives, recommendations, and key actions in this draft plan. Your comments will help the Watershed Advisory Committees finalize the plan, which will then be submitted to governments and other agencies for their consideration and response.

Open Houses:

A series of open houses will be held to give you an opportunity to learn more about the plan and planning process and talk with the people who developed it, and also to provide us with an opportunity to receive your feedback. These open houses will be held as follows:

- **Langenburg Community Centre - Monday, April 24th**
- **Preeceville Recreation Hall - Tuesday, April 25th**
- **Riverside Golf Club in Kamsack - Wednesday, April 26th**
- **Theodore Recreation Complex - Thursday, April 27th**

All meetings: 5-9 p.m.

Assiniboine River Watershed

The Assiniboine River and its tributaries are located in eastern Saskatchewan and western Manitoba. Within Saskatchewan, the Assiniboine River Watershed covers an area of 17,300 square kilometres and includes 24 rural municipalities, eight towns, 15 villages and the cities of Melville and Yorkton.

A more thorough overview of the Assiniboine River Watershed is available in the Upper Assiniboine River Basin Study. This study, conducted by the governments of Saskatchewan, Manitoba and Canada, is also available online at www.swa.ca.

Saskatchewan Watershed Authority

Assiniboine River Watershed Advisory Committees

Planning Process and Watershed Advisory Committees

Saskatchewan's drinking water can be divided into three major components: the source water, the water treatment system and the distribution system. Source water protection is considered the first barrier in the multi-barrier approach to attaining safe drinking water, and it is normally viewed as both more effective and more efficient to prevent the contamination of source water than it is to remove contaminants at water treatment facilities. Therefore, it makes sense as part of Saskatchewan's Safe Drinking Water Strategy for these planning efforts to focus on protecting source waters.

Source Water Protection is the prevention of pollution and the sound management of factors and activities that (may) threaten water quality and quantity of lakes, reservoirs, rivers, streams and groundwater.

This source water protection plan was developed by watershed residents through their participation on Watershed Advisory Committees. To facilitate planning, the watershed was divided into the Assiniboine River and Whitesand River subwatershed planning units. Two Watershed Advisory Committees with representatives from rural and urban municipalities, First Nations, as well as stewardship, agricultural and other interest groups, were organized to identify issues and develop objectives, recommendations, and key actions. A Technical Committee was assembled to provide scientific knowledge and application. All decisions of the Watershed Advisory Committees and the Technical Committee were made through consensus.

The current members of the Watershed Advisory Committees are:

Assiniboine River Watershed Advisory Committee

Brian Bolouc/Denis Wishnevetski
Town of Kamsack
Vern Bowes
Rural Municipality of Cote No. 271
Wallace Butterfield
Rural Municipality of Keys No. 303
Gil Comeault
Rural Municipality of St. Philips No. 301
Douglas Ferder
Rural Municipality of Clayton No. 333
Don Fogg
Town of Langenburg
Terry Keewatin
Yorkton Tribal Council/Cote First Nation
Neil Mehrer
Rural Municipality of Churchbridge No. 211
Ken Mitchell
Rural Municipality of Preeceville No. 334
Don Olson (Chair)
Town of Sturgis
Ernie Patrick
Sask Pork
Marlo Schappert
Rural Municipality of Langenburg No. 181
Gerald Schepp
Rural Municipality of Calder No. 241
Barry Schultz
Langenburg East Conservation & Development Area
Beatrice Sekel
Town of Preeceville
Ken Somogyi
Saskatchewan Wildlife Federation

Whitesand River Watershed Advisory Committee

Russel Baron
Buchanan Conservation & Development Area
Viola Bell
Metis Nation of Saskatchewan
Shirley Biro
Village of Willowbrook
Dale Cherry/Gary Liebrecht
Rural Municipality of Wallace No. 243
Fay Hanson
Rural Municipality of Foam Lake No. 276
Dale Heshka
City of Melville
Janet Hill
City of Yorkton
Jeff Hunter
Village of Rama
James Hupka
Rural Municipality of Good Lake No. 274/ Burgiss Conservation & Development Area
Ed Keyowski
Rural Municipality of Sliding Hills No. 273
Adam Kosar
Village of Buchanan
Ron Kulyk
Rural Municipality of Sasman No. 336
Garry Kupchinski
Rural Municipality of Buchanan No. 304
Ben Pengilly
Rural Municipality of Cana No. 214
Bob Pratt
Fishing Lake First Nation/ Touchwood Agency Tribal Council
Jack Prychak/Tom Niecker
Rural Municipality of Invermay No. 305
Ray Reisz
Friends of Good Spirit Lake
Al Schatz
Rural Municipality of Stanley No. 215
Eugene Secondiak
Good Lake Conservation & Development Area
Ken Smuk
Rural Municipality of Garry No. 245
Don Taylor
Rural Municipality of Saltcoats No. 213
Don Walters
Spirit Creek Monitoring Group

106-07012/

Objectives and Key Actions

The Technical Committee recognized that analyzing every aspect of every issue would be prohibitively time consuming. After analyzing the issues and sorting them according to their relevance to source water protection, only the highest-ranking 'risk areas' were considered further in developing the objectives, recommendations, and key actions for the Assiniboine River Watershed Source Water Protection Plan.

Finalizing the objectives required several iterations between the Technical Committee and Watershed Advisory Committees before reaching consensus. The planning process then focused on developing recommendations and key actions for each objective. The Watershed Advisory Committee asked the Technical Committee to use their expertise to develop a list of recommendations and key actions.

The Technical Committee met on several occasions to develop, review and discuss potential recommendations and key actions. Once the list was developed, a joint meeting between the Technical and Watershed Advisory Committees was held to review and discuss the recommendations and key actions in order to reach consensus between these two committees.

The following is the list of the objectives, recommendations and key actions agreed to by both committees.

Objective 1:

Empower the local watershed citizens to promote and implement a healthy watershed strategy.

Key Action: Seek support from Watershed Advisory Committee members in forming the Assiniboine River Watershed Advisory Board, and explore funding sources.

Time Frame	Responsibility
During 2006	Assiniboine River Watershed Advisory Board* Saskatchewan Watershed Authority* Assiniboine River Watershed Technical Committee

Key Action: Hire a full-time Local Watershed Manager who would report to the Assiniboine River Watershed Advisory Board.

Time Frame	Responsibility
By the end of 2006	Assiniboine River Watershed Advisory Board* Saskatchewan Watershed Authority*

Objective 2:

Protect the source drinking water for all communities.

Key Action: Compile and collect existing well data.

Time Frame	Responsibility
2006	Saskatchewan Watershed Authority*

* Lead agency

Key Action: Categorize the risk situation (i.e. "low", "medium", "high") for all community wells. The aquifer within which the well is located will be categorized by its risk vulnerability.

Time Frame	Responsibility
2006	Saskatchewan Watershed Authority*

Key Action: Determine how Saskatchewan Environment's well head protection program could be used to enhance the wellhead integrity program.

Time Frame	Responsibility
2006	Saskatchewan Watershed Authority Saskatchewan Environment

Key Action: Increase site inspections and collect data from additional sites, specifically targeting community wells and aquifers.

Time Frame	Responsibility
2006 - 2011	Saskatchewan Watershed Authority* Individual communities and Rural Municipalities

Key Action: Develop programs to address the issues that arise from carrying out the above-mentioned key actions.

Time Frame	Responsibility
2007 & forward	Assiniboine River Watershed Advisory Board* Saskatchewan Watershed Authority* Assiniboine River Watershed Technical Committee

Key Action: Identify the surface water sources being used for community drinking water.

Time Frame	Responsibility
2006	Saskatchewan Watershed Authority* Assiniboine River Watershed Advisory Board

Key Action: Develop site-specific or subwatershed plans for those communities using surface water as the source of their drinking water.

Time Frame	Responsibility
2007	Saskatchewan Watershed Authority* All communities Assiniboine River Watershed Advisory Board

* Lead agency

Objective 3:
Improve the health of aquatic ecosystems in the watershed.

Key Action: Collect hydrological and fish passage data during the spring spawning season at selected obstructions.

Time Frame	Responsibility
2005-2007	Saskatchewan Watershed Authority* Fisheries and Oceans Canada Saskatchewan Wildlife Federation

Key Action: Conduct biological and engineering evaluations of potential fish barrier structures at the selected sites.

Time Frame	Responsibility
2005-2007	Saskatchewan Watershed Authority Fisheries and Oceans Canada

Key Action: Determine the best solutions to mitigate these barriers.

Time Frame	Responsibility
2005-2007	Saskatchewan Watershed Authority Fisheries and Oceans Canada Local governments Local landowners

Key Action: Prioritize, consult, and develop strategies for upgrading these sites.

Time Frame	Responsibility
2005-2007	Saskatchewan Watershed Authority Fisheries and Oceans Canada

Key Action: Seek funding, including from the original funding partners of the constructed works, to carry out the recommended mitigation works.

Time Frame	Responsibility
2005-2007	Saskatchewan Watershed Authority* Fisheries and Oceans Canada Saskatchewan Wildlife Federation Local governments

Key Action: Implement the recommended works.

Time Frame	Responsibility
2006-2008	Saskatchewan Watershed Authority Fisheries and Oceans Canada Saskatchewan Environment Local Landowners Assiniboine River Watershed Advisory Board

* Lead agency

Objective 4:
Improve the overall water quality throughout the Assiniboine River Watershed.

Agriculture

Key Action: Decrease the number of cultivated acres that are under summer fallow management (fallowed by tillage) in the Assiniboine River Watershed by 50 percent over the years 2006 to 2011.

Time Frame	Responsibility
2006 - 2011	Saskatchewan Soil Conservation Association* Saskatchewan Agriculture and Food Assiniboine River Watershed Advisory Board

Key Action: Increase the number of cultivated acres that are direct seeded in the Assiniboine River Watershed (with the appropriate nutrient management) by 100 percent over the years 2006 to 2011.

Time Frame	Responsibility
2006 - 2011	Saskatchewan Soil Conservation Association* Saskatchewan Agriculture and Food Assiniboine River Watershed Advisory Board

Key Action: Increase the number of kilometres of functional riparian buffers along cultivated fields and pasture lands that are adjacent to water courses.

Time Frame	Responsibility
2006 - 2011	Saskatchewan Watershed Authority* Assiniboine River Watershed Advisory Board* Saskatchewan Agriculture and Food Ducks Unlimited Canada Fisheries and Oceans Canada

Key Action: Reduce the number of cultivated acres that are sensitive to wind and/or water erosion (because of soil type and/or topography) by converting this land to permanent cover.

Time Frame	Responsibility
2006 - 2011	Saskatchewan Agriculture and Food* Saskatchewan Watershed Authority Ducks Unlimited Canada Prairie Farm Rehabilitation Administration Assiniboine River Watershed Advisory Board

Key Action: Promote the retention and restoration of wetlands on the uplands through education and programming.

Time Frame	Responsibility
2006 - 2011	Saskatchewan Agriculture and Food Ducks Unlimited Canada Saskatchewan Watershed Authority Assiniboine River Watershed Advisory Board

* Lead agency

Key Action: Collect water quality nutrient data at strategic points in the watershed to determine the variability of nutrients within the watershed.

Time Frame	Responsibility
2007-2008	Saskatchewan Watershed Authority Assiniboine River Watershed Advisory Board

Livestock

Key Action: Encourage all producers to develop and adopt manure management plans.

Time Frame	Responsibility
2006 - 2011	Saskatchewan Agriculture and Food Assiniboine River Watershed Advisory Board

Key Action: Eliminate the use of cattle concentration sites near waterways.

Time Frame	Responsibility
2006 - 2011	Saskatchewan Agriculture and Food* Saskatchewan Watershed Authority Environment Canada Assiniboine River Watershed Advisory Board

Key Action: Eliminate prolonged occurrences of bank destabilization from livestock activities.

Time Frame	Responsibility
2006 - 2011	Saskatchewan Agriculture and Food* Saskatchewan Watershed Authority Environment Canada Assiniboine River Watershed Advisory Board

Key Action: Develop a strategy to manage leased Crown lands so that livestock pastured on them have minimal impact on source water in the Assiniboine River Watershed. Water management issues arising on Crown lands that affect adjacent land owners also need to be addressed.

Time Frame	Responsibility
2006 - 2011	Saskatchewan Agriculture and Food* Saskatchewan Watershed Authority Saskatchewan Environment

* Lead agency

Roadways

Key Action: Enhance roadway construction practices by developing best practices to reduce the impact on adjacent water courses.

Time Frame	Responsibility
2006 – 2007	Saskatchewan Highways and Transportation* Saskatchewan Association of Rural Municipalities Saskatchewan Urban Municipalities Association Fisheries and Oceans Canada

Key Action: Make funding approval for road construction contingent on the fulfillment of conditions and specifications related to these best practices. Natural drainage patterns are to be maintained.

Time Frame	Responsibility
2008	Saskatchewan Highways Saskatchewan Association of Rural Municipalities Saskatchewan Urban Municipalities Association Prairie Farm Rehabilitation Administration Federal Infrastructure

Urban Storm Water

Key Action: Proceed with the proposed City of Yorkton storm water study as soon as possible.

Time Frame	Responsibility
2006 – 2007	Saskatchewan Watershed Authority City of Yorkton

Key Action: Develop a guideline document detailing best practices for managing storm water, emphasizing source water protection for the Province of Saskatchewan.

Time Frame	Responsibility
2006	Saskatchewan Environment*

Key Action: Inform communities about these guidelines and encourage them to begin adopting the recommended best practices.

Time Frame	Responsibility
2006 and forward	Saskatchewan Environment Saskatchewan Urban Municipalities Association Assiniboine River Watershed Advisory Board

* Lead agency

Municipal Wastewater

Key Action: Provide a risk rating of all municipal wastewater lagoons within the watershed.

Time Frame	Responsibility
2006	Saskatchewan Environment*

Key Action: Determine the total lagoon nutrient releases within the watershed and estimate the significance of this from a nutrient balance perspective.

Time Frame	Responsibility
2006 – 2007	Saskatchewan Environment Saskatchewan Watershed Authority

Key Action: Evaluate the current lagoon release regulations to determine if they are appropriate based on the estimated significance of the total nutrient load of the lagoons, and then determine if changes in lagoon practices are warranted.

Time Frame	Responsibility
2008	Saskatchewan Environment Saskatchewan Watershed Authority

Key Action: Inform landowners and communities downstream of lagoons of pending releases in order to synchronize surface water withdrawals and usages with the releases.

Time Frame	Responsibility
2007 - 2008	Saskatchewan Environment Saskatchewan Urban Municipalities Association Saskatchewan Association of Rural Municipalities Assiniboine River Watershed Advisory Board

City of Yorkton Wastewater

Key Action: Determine the information gap regarding the 'environmental fate' of the wastewater plant nutrient releases to Yorkton Creek and the Whitesand River.

Time Frame	Responsibility
2007 - 2010	Saskatchewan Watershed Authority* Saskatchewan Environment City of Yorkton

Key Action: Evaluate the plant to determine if there are relatively simple and inexpensive modifications that can be made to the plant and/or to its operations that would reduce the amount of nutrients in the plant effluent.

Time Frame	Responsibility
2007 – 2008	Saskatchewan Environment City of Yorkton Saskatchewan Watershed Authority

* Lead agency

Key Action: Conduct a basic nutrient source analysis for the City of Yorkton to determine if there are opportunities to reduce nutrient loading prior to waste reaching the treatment plant.

Time Frame	Responsibility
2006	Saskatchewan Watershed Authority* City of Yorkton

Key Action: Develop an education strategy for the community to enhance residents' awareness of their impact on the city's wastewater.

Time Frame	Responsibility
2007	Saskatchewan Watershed Authority* City of Yorkton Assiniboine River Watershed Advisory Board

Objective 5:

Develop education strategies and increase awareness of source waters and associated issues within the Assiniboine River Watershed.

Key Action: Communicate the Saskatchewan Watershed Authority's definition of source water protection to residents within the Assiniboine River Watershed.

Time Frame	Responsibility
2007 and onwards	Saskatchewan Watershed Authority* Assiniboine River Watershed Advisory Board

Key Action: Promote the importance of regular water quality testing.

Time Frame	Responsibility
2007 onwards	Saskatchewan Health Saskatchewan Association of Rural Municipalities Saskatchewan Watershed Authority Assiniboine River Watershed Advisory Board

Key Action: Deliver regular water quality testing campaigns.

Time Frame	Responsibility
2007 onwards	Saskatchewan Health Saskatchewan Association of Rural Municipalities Saskatchewan Watershed Authority Saskatchewan Research Council Assiniboine River Watershed Advisory Board

Key Action: Participate in completing the Environmental Farm Plan workbook.

Time Frame	Responsibility
2006 - 2007	Saskatchewan Watershed Authority Saskatchewan Agriculture and Food Ducks Unlimited Canada Assiniboine River Watershed Advisory Board

* Lead agency

Key Action: Identify common "on-farm" issues.

Time Frame	Responsibility
2006 - 2007	Saskatchewan Watershed Authority Saskatchewan Agriculture and Food Saskatchewan Environment Environment Canada

Key Action: Select programs to address these issues.

Time Frame	Responsibility
2006 - 2007	Saskatchewan Watershed Authority Saskatchewan Agriculture and Food Ducks Unlimited Canada

Draft
Assiniboine River Watershed Source Water Protection Plan

It is vital to the Assiniboine River Watershed Source Water Protection Plan review process that the public provide comments on the overall plan, and specifically on its recommendations and key actions. Your participation, as a resident of the watershed, is required to reach a consensus on the steps we must take to help protect our water supplies.

Comments and Review

Optional Contact Information

The draft **Assiniboine River Watershed Source Water Protection Plan** is available online in its entirety at **www.swa.ca**. Printed copies will also be made available upon request.

We hope that this summary has encouraged you to review the entire draft plan and to provide your comments and suggestions. Please feel free to provide us with your comments by **May 31st** by contacting Rob Kirkness by mail, fax or e-mail AssiniboinePlan@swa.ca

Published by:

Saskatchewan Watershed Authority

April 2006

Rob Kirkness, P.Eng.
Watershed and Aquifer Planning
Saskatchewan Watershed Authority
2nd Floor, 120 Smith Street East
Yorkton, Saskatchewan S3N 3V3
Phone: (306) 786-1486
Fax: (306) 786-1495